

# GLOBALWATERS GLOBALWATERS MOBILIZING COMMUNITIES for LASTING CHANGE IN AFGHANISTAN

## **ALSO IN THIS ISSUE**

Next Steps for Millennium • Post-Flood Pakistan • Innovations Changing Water Development Goals



## LETTER FROM THE WATER OFFICE

Over the last 50 years, USAID has brought safe water and sanitation to tens of millions. We have learned to select effective partners, target needy beneficiaries, and foster real change. But how do we guarantee that this change lasts? This issue of *Global Waters* looks at some of the key ingredients for sustainable success, from community mobilization to trailblazing approaches that harness cutting-edge technology.

Our cover story looks at the USAID/Afghanistan Sustainable Water Supply and Sanitation project's efforts to mobilize citizens in rural Afghanistan to build their own latrines and monitor their own wells. This is a captivating story about the commitment of rural Afghans to secure continuous access to clean water and to ensure that their communities become and remain open defecation free.

Sustainability and food security are intrinsically linked. This month's "In Focus II" story looks at how USAID provided sustainable agricultural relief to post-flood Pakistan. By empowering farmers to restore their own irrigation systems and regain their harvests, USAID prevented a deadly cycle of food shortages, poverty, and underdevelopment.

Pioneering approaches can also offer sustainable solutions to water problems. We look at how new technology like cell phones can empower communities and bring real change. We also interview the architects of the U.S. Water Partnership and gain insight into how partnerships lead to sustainable development.

Finally, the announcement in March 2012 that we have met the Millennium Development Goal to halve the number of people without access to water has made waves in the water sector. Incoming USAID Water Office Director John Pasch provides some ideas on how we can capitalize on these gains and make sure they last.

There are no easy answers, but through working together, learning from experience, and embracing innovation, we can make a difference for the next 50 years.

USAN

USA

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**SUSTAINABLE SOLUTIONS:** Flood-affected Pakistani farmers in Khyber Pakhtunkhwa survey their harvest after USAID/Pakistan's Agriculture Recovery Program helped them get back on their feet.

Photo Credit: Mehdi Ali Khan, USAID/Pakistan

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ON THE COVER: An Afghan girl gathers water from a river. Often, the burden of collecting water in Afghanistan falls on children.

## PERSPECTIVES

## MILLENNILIM DEVELOPMENT GOALS: On the Crest of Success USAID Focuses on Challenges

n March 6, 2012, the United Nations announced that the proportion of people living without access to safe drinking water was decisively cut in half five years ahead of the 2015 target. Over the last decade, the Millennium Development Goals (MDGs) for water and sanitation have represented a set of harmonizing objectives around which donors, implementers, and countries could unite and collaborate. The success of our cumulative efforts in meeting these goals is an encouraging milestone in the movement toward universal access to safe water. However, now is not the time to slow down, as 783 million people still live without access to safe water. We must expand on our success, learn from where we have fallen short, set new goals, and adapt our efforts through improved and sustainable methodologies, innovative and scientific solutions, and aid effectiveness.

Through collective action, USAID, other U.S. Government agencies, and numerous partners in the international community are pleased to have contributed to the

provision of first time access to safe drinking water for millions around the globe. With water, sanitation, and hygiene (WASH) programs in 66 countries, USAID spent more than \$520 million on WASH in FY 2010 alone.

But as we celebrate the success of reaching the MDG for improved water access, the world is far from meeting the MDG target for sanitation. Globally, access to

**"WE MUST EXPAND** ON OUR SUCCESS, LEARN FROM WHERE

WE HAVE FALLEN SHORT. SET NEW GOALS, AND ADAPT OUR EFFORTS."

in sanitation have only increased to 63 percent. That is still well below the 75 percent MDG target. Achieving this target is tremendously important. Every year, 1.4 million children die from diarrhea - one child every 20 seconds. No other single intervention brings greater public health returns. USAID recently launched the "Every Child Deserves a Fifth Birthday" campaign, to envision a world where diarrhea is no longer one of the top three killers of children under five. Since diarrhea is primarily caused by unsafe water, inadequate sanitation, and poor hygiene, USAID must target the people and places most in need.

water increased to 89 percent in 2010, while improvements

We must also strike a balance between what is judged as success and what is actually sustained success. There have been impressive quantifiable achievements in the number of latrines and water points built, and these hardware components of programs have received the most attention. The MDG for water and sanitation does not address or measure the fact that many latrines and water supply systems fall into disrepair and go unused. USAID

> and its partners must ensure the sustainability of functioning hardware by establishing systems to maintain them. Such systems can, however, be a challenge to get right – as is shown by the failure to maintain as many as 30-40 percent of village pumps in Africa.

> One key to sustainability is collaborative engagement with our partners to establish effective

"BUT AS WE CELEBRATE THE SUCCESS OF REACHING THE MDG FOR IMPROVED WATER ACCESS, THE WORLD IS FAR FROM MEETING THE MDG TARGET FOR SANITATION."



**DAILY CHORE:** A Mayan-Chortí woman and her daughters collect water at a standpipe in a village near Copan Ruinas, Honduras. Photo Credit: Sean Hawkey, Courtesy of Photoshare

monitoring and evaluation systems so we know whether hardware installed is maintained in a functioning condition. The software components of our programs – awareness, training, behavior change, and cost-recovery – are just as important as the hardware itself. Well planned and coordinated software interventions can ensure that related water and sanitation hardware investments result in sustained behavior change necessary for improving health conditions.

USAID will take a holistic approach in implementing solutions, sharing innovations, and scaling up successful programs through new and innovative partnerships in the water sector. Among these, the March 2011 Memorandum of Understanding between USAID and the World Bank has spawned six working groups to serve as platforms for collaborating around and advancing methodologies for the water sector and its cross-cutting components. USAID's Development Innovation Ventures funding program creates partnerships with innovators and social entrepreneurs, including a new \$17 million partnership with the Gates Foundation called WASH for Life to promote cost-effective and scalable WASH services. And, the Sanitation and Water for All partnership and new U.S. Water Partnership will allow USAID to increase donor focus and coordination, pool resources and collaborate on solutions, and increase project sustainability through improved information sharing, monitoring, and evaluation.

The MDGs for water and sanitation have been a clarion call to address global water and sanitation challenges. But as we move forward, USAID and our partners must work together and focus on the key challenges at hand to advance beyond these goals and create a world where every society has enough water to meet their needs and children live to celebrate life well beyond their fifth birthday.

John Pasch, Incoming USAID Water Office Director

FOR MORE INFORMATION, VISIT: The U.N's Millennium Development Goals MDG Monitor

# IT STARTS WITH SUSTOINOBILITY A Winning WASH Formula in Afghanistan

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**WORKING TOGETHER:** Children in the Shahidan community are now able to collect water for use in their homes using wells the community built with help from SWSS. Photo Credit: USAID/SWSS

## ON THE WATERFRONT

AFGHANISTAN HAS WEATHERED DECADES OF CONFLICT, BUT THE BIGGEST THREATS FACING ITS CHILDREN ARE UNSAFE WATER AND SANITATION. JUST 27 PERCENT OF RURAL HOUSEHOLDS HAVE ACCESS TO IMPROVED DRINKING WATER, AND ONLY 10 PERCENT OF THE POPULATION HAVE ACCESS TO IMPROVED SANITATION FACILITIES. YOUNG GIRLS AND BOYS OFTEN MISS SCHOOL BECAUSE THEY HAVE TO WALK LONG DISTANCES TO COLLECT DRINKING WATER FROM UNCLEAN SOURCES. CONSEQUENTLY, SIX AFGHAN CHILDREN DIE EVERY HOUR FROM DIARRHEAL DISEASES.



**FILLING UP:** Children in Nawa, Afghanistan fill their containers with fresh running water.

#### Photo Credit: USAID/LGCD

Since 2009, Afghan villagers have mobilized to improve water and sanitation with the help of USAID's Sustainable Water Supply and Sanitation (SWSS) project. The project (pronounced "swiss") has increased access to sanitation by working with community members to build or renovate 38,388 latrines and has increased access to safe drinking water by constructing over 2,674 wells. But, most importantly, SWSS started by focusing on sustainability.

#### From Hardware to "Software"

While constructing latrines and wells is essential for improved public health in rural Afghanistan, it is not enough to create a lasting impact. Generations of life without proper access to latrines or clean water had ingrained unhealthy habits in many villagers, and 89 percent of rural Afghans defecated out in the open. For the program to be sustainable, villagers would have to make fundamental changes to their behavior, and real change takes time. SWSS engaged with national and provincial departments of Afghan ministries, community leaders, and local villagers to promote key behavior changes that, together with new and improved facilities, would reduce the incidence of diarrheal diseases and boost public health. This is the kind of investment in development that lasts.

The fulcrum of this strategy was community-led total sanitation (CLTS). CLTS is a collective behavior change methodology that invokes feelings of shame and disgust to improve the overall health of a community by visually demonstrating the proximity of fecal matter to water resources. The goal of CLTS programs is to certify villages as "open defecation free."

At the heart of CLTS lies the recognition that merely providing toilets does not guarantee their use, nor result in improved sanitation and hygiene. Earlier approaches to sanitation had prescribed high initial standards and offered subsidies as an incentive. But this often led to uneven adoption, problems with long-term sustainability, and only partial use. Open defecation and the cycle of fecal-oral contamination continued to spread disease. SWSS invested in community mobilization instead of hardware and shifted the focus from toilet construction for individual households to the creation of open defecation free villages. By raising awareness of the reality that everyone is at risk of disease if even a minority continues to defecate in the open, CLTS triggers the community's desire for change, propels them into action, and encourages innovation, mutual support, and appropriate local solutions. This leads to greater ownership and sustainability.

#### It Takes a Village

To foster this feeling of ownership, CLTS requires the involvement of the communities. "You have to first establish trust and an understanding of the community and how it functions," said Dr. Christopher McGahey, senior associate at SWSS implementing partner Tetra Tech ARD. This level of trust can take months, even years to establish, which is time that the project did not have. To address this challenge, SWSS turned to one of its USAID health program partners, Management Sciences for Health, which already had a decade-long track record of success working with Afghan communities and had established a network of NGOs.

By working through this network, SWSS engaged community members in the planning, design, and implementation of the CLTS approach. SWSS trained 682 Afghan facilitators to bring CLTS to communities and 3,960 community leaders to promote hygiene. "We were ensuring ownership and sustainability at the community level," said Dr. Gul Afghan Saleh, senior program manager for energy and water at USAID/Afghanistan. Involving the Afghans every step of the way, SWSS ensured that CLTS lessons appealed to local customs, attitudes, and values and resonated with villagers. Shahla, a student from Laghman province, said that her religion helped her see the value of CLTS, "Islam is a complete religion that advises all humans to wash hands with clean water and soap, as long as there are millions of germs living in the environment."

To ensure that communities become open defecation free, women were brought into the forefront and trained in health and hygiene promotion. "Hygiene and sanitation without the involvement of women cannot be achieved in any society," said Bimal Chapagain, former director of sustainable health outcomes for the SWSS project. They participated in what Dr. McGahey called "mother-tomother peer education programs" through the creation of Family Health Action Groups of local women, selected by their communities to be trained. They then taught other women in the community about health and hygiene practices. These women would in turn educate their families, leading to community-wide behavior changes. "My husband gathered other men to support their ladies and bring a healthy environment to the village," said Fatima, one of the participating women from Badakhshan province. A cycle of good hygiene was set into motion. Already, 394 communities have been certified open defecation free.

#### **Tools for Change**

Providing the infrastructure and tools to change behaviors related to sanitation was just half the formula for decreasing instances of diarrheal disease. There was still work to be done to ensure continuous access to safe drinking water across Afghanistan's rural countryside. The new water infrastructure brought clean water to 511,150 Afghans, but SWSS had to ensure the sustainability of these gains. Since an estimated 30 to 50 percent of all water points in Afghanistan are not functional after two years due to maintenance or construction issues, communities would have to be equipped with new tools to ensure maintenance of the wells over the long term.

**EASING THE BURDEN**: New wells, like this one in Kharwar District, Logar province, provide easy access to clean water in insecure communities like never before.

Photo Credit: USAID/SWSS



SWSS addressed this by training locals selected by their communities to repair broken hand-pump wells. Local councils oversaw the compensation of the hand-pump mechanics based on community standards, thus creating a livelihood for dozens of previously unemployed people. Each mechanic is now responsible for maintaining specific wells. One mechanic from Kandahar province, Mohammed, expressed a desire to keep building upon his newfound knowledge. "I'm

**MY HUSBAND** GATHERED OTHER MEN TO SUPPORT THEIR LADIES AND **BRING A HEALTHY ENVIRONMENT TO** THE VILLAGE

hoping to gain all the knowledge and expertise needed for the proper maintenance of wells," he said. Malak, a mechanic from Parwan province, said he was so happy with his new profession that he wanted to spread the wealth, "I trained my two brothers in this same field, and now each of them can make enough money to support their families."

As an added assurance that the wells remain operational, SWSS empowered citizens with a well-monitoring tool called Watertracker. The project trained select community members to report on each well's functionality by calling a hotline using a unique identification number for each water point. To report a problem, a villager enters the well's number and follows two simple prompts. Callers are

able to leave longer, more detailed messages about the problem that they are facing.

Once a community member concludes his or her report, the information is transferred to the Watertracker website with all new data and changes instantaneously reflected. The website was developed using the Ushahidi platform, an open source information management software

that facilitates data crowd sourcing and mapping. Each water point is color-coded to indicate its functioning status. Detailed well information, such as the technical specifications, project history, community contact information, and the recorded voice messages left by community members are stored on dedicated, searchable pages for each water point constructed during the project. According to Nicola Armacost, managing director of SWSS partner Arc Finance, the data available on Watertracker tells "the story of the well from both an engineering and community perspective."

Using the regular phones that community members already own, Watertracker enables SWSS to track the status of its wells, while also providing further assistance to

TAKING CHARGE: From mapping well locations to constructing the actual wells, community members are involved every step of the way, taking their futures into their own hands. Photo Credit: USAID/SWSS



PEER EDUCATION PROGRAM: Women attend an event for promoting better hygiene practices and behavior in the Naw Joy community. Photo Credit: Dr. Mohammad, WASH Coordinator for SWSS

communities. After a call comes in, a technical associate for Watertracker follows up with the communities to get more information and help facilitate a resolution. This could require activating the contractor's warranty so that the design and construction of the well can be tweaked, finding a replacement for an absent well caretaker, or assisting communities in working out financing mechanisms to pay for part replacements.

Soon, Watertracker will be entirely in the hands of Afghans. Ownership of Watertracker will be transitioned to the Afghanistan Ministry of Rural Rehabilitation and Development, and so far, 1,131 Afghans have been trained to support the Watertracker system, including 994 wellcaretakers and 137 mechanics.

#### **Lasting Change**

In Afghanistan, villagers have begun to experience the fruits of their labor. "Clean water has decreased the level of diarrheal diseases and enhanced the economic status of local residents," said Sayed Wali of Nangarhar province. One of his neighbors, Qari Atiqulla, agreed and said, "This project was the dream of local residents, which has turned into a reality."

While SWSS ends in September 2012, the work of the villagers has only just begun. It won't be easy, but they have proven that they are up for the challenge. Families have mobilized to build themselves latrines. Community members are working hard to keep their wells functioning. Jamaluddin from Laghman province echoed the sentiments of many with newfound purpose when he said, "Now, this is our responsibility."

**Global Waters Editors** 

## FOR MORE INFORMATION, VISIT: USAID/Afghanistan SWSS

USAID/Afghanistan on Facebook USAID/Afghanistan on Twitter Read Previous Global Waters article on CLTS A Look at the Ushahidi Platform





#### TRANSFORMING THE WATER SECTOR THROUGH INFORMATION AND COMMUNICATION TECHNOLOGY

February 23, 2012

Core issues of governance were among the themes of the recent USAID/World Bank Learning Event on information and communication technology (ICT) held during the World Bank's Sustainable Development Network (SDN) week. Experts from the water and ICT sectors discussed greater accountability, transparency, results, and collaboration through open innovation. The event began with introductions by Rachel Kyte, Vice President of SDN at the World Bank and Christian Holmes, USAID Global Water Coordinator. Vivek Kundra, former U.S. Chief Information Officer delivered the keynote speech on Open Government.

To highlight examples of how ICTs can transform a sector, two panels of experts from the Department of State, the World Bank, Akvo, Ushahidi, the Pacific Institute, and Nokia shared innovative mobile and mapping solutions for water. Project examples included Haiti, Afghanistan, Kenya, Indonesia, and Central America. With more than 150 U.S. Government and World Bank staff members in attendance, lively discussions about implementation, sustainability, affordability, and replicability followed.

Participants also interacted with the experts in smallgroup clinics to learn how to use the technology, including TileMill from MapBox. This event is an activity under the U.S. Government-World Bank MOU on Water, signed on World Water Day, March 22, 2011, by Secretary Clinton and President Zoellick. THE 6TH WORLD WATER FORUM IN MARSEILLE, FRANCE March 12-17, 2012

A Time for Solutions was the theme of the 6th World Water Forum held in Marseille, France, from March 12-17, 2012. Over 35,000 attendees including Heads of States, U.N.Agencies, parliamentarians, water practitioners, NGO and civil society representatives, academics, women's associations, donors, youth, and other stakeholders from 170 countries convened to make it the world's largest international event on water issues.

Attendees participated in over 400 sessions and debates to collaborate on real and practical measures and pledge solid commitments for making progress in the water sector. The focus of this year's forum was to prioritize action by availing solutions from the ground and at different levels of government in countries around the world.



Among the substantial results, governments renewed commitments and bolstered the Sanitation and Water for All Partnership, which was to be revisited in the April High Level Meetings at the World Bank in Washington, DC. The Forum also hosted high level roundtables to

discuss solutions for increasing access to improved water and sanitation, investigating the water-energy-food nexus, promoting water security and sustainability, facilitating transboundary cooperation, and financing infrastructures.

"Nothing about them without them," USAID Deputy Administrator and Head of the U.S. Delegation Don Steinberg declared in a meeting with civil society groups. Steinberg insisted that solutions need to include beneficiaries in project design, planning, and implementation to truly be successful. With this attitude, Steinberg joined Ministers from Uganda and South Africa during a High-Level Panel on Women's Leadership in Water and pledged to work with global partners to develop a water and gender index on gender-disaggregated data. Additionally,

A. Gambrill

along the lines of finance, USAID co-hosted a workshop with Japan's International Cooperation Agency (JICA) on "Boosting Public-Private Partnerships in the Water Sector" to announce expansion of its joint activities in the Philippines to Vietnam and several parts of Africa.

Loïc Fauchon, President of the World Water Council, closed the forum, "All is not finished yet. We are now facing the challenge to act. And we are expected to act!" Attendees left the Forum, looking forward to making Water an integral issue at Brazil's Rio +20 in June.

K. Patel

#### WORLD WATER DAY

March 22, 2012

Secretary Clinton announced the launch of a new publicprivate water partnership that will increase the impact of America's work on water in a speech at the U.S. Department of State. The U.S. Water Partnership brings together partners from the private sector, the philanthropic community, NGOs, academia, and the government to share information on bringing safe water to developing nations in a sustainable way. Secretary Clinton stated that water must remain a priority in order to ensure continued success in improving national security as she announced the release of the National Intelligence Council's assessment of global water security. The report states that water security is

an essential component of U.S. national security interests. This report makes it clear that increasing access to clean water is not just a development imperative, but also a peace and security necessity.

Across the globe, thousands celebrated



World Water Day in their communities and schools by learning about the role of water in food security. Groups watched videos, participated in events online, planted seeds in community gardens, and attended workshops to share experiences on gardening, fishing practices, food security, and water scarcity. World Water Day events will continue to take place through the end of summer and follow-on events continue to be added.

Listen to "Global Water Security: The Intelligence Community Assessment" podcast

C.Wixted

**EARTH DAY** April 22, 2012



In honor of Earth Day, and as a sponsored event by the UNEP World Environment Day, the U.S. Department of State held its second "6K Walk for Water" in Washington, D.C., where participants walked the same distance as water-seeking women and girls in developing nations to help bring awareness to this issue. Across the developing world, women and girls are responsible for fetching water for drinking, cooking, and washing. To provide for their families, they walk an average of six kilometers each day carrying 15-20 liters of water that weigh about 44 pounds. This time-intensive activity keeps them out of school and deprives them of opportunities to generate income. Over half of the 72 million children not attending school around the world are girls. USAID and EPA also held a 6K Walk for Water on April 27 in Washington, D.C. to address issues of water scarcity, conservation, and access as part of its Earth Day celebrations.

C.Wixted

# THE PALMS OF THER HANDS

TEXT TO ECHANGE

Stay Healthy and Informed Make Educated Choices Spread the Message

**TEXT TO CHANGE:** At the event, residents of Lwebitakuli, Uganda, learned about the importance of sanitation in avoiding infectious disease. Photo Credit: Text to Change In an age when people line up at dawn to replace their old iPads with the latest model, it may seem that technology is first and foremost an indulgence for the elite. But declining costs of cellphones, the wide availability of the Internet, and a trend toward open data and open source software have extended the benefits of modern technology to a broad segment of society. USAID is applying this technology to engage communities, increase self-sufficiency, and boost livelihoods in an increasing number of cutting-edge programs across the globe.

Despite their might, cellular phones, social networks, and laptops cannot alone alleviate famines, improve public health, or provide disaster relief. Used innovatively, however, they present an opportunity to impact development in ways that traditional methods cannot. More than anything, technology enables the transfer of knowledge, empowering individuals and communities to make informed decisions to secure their health and livelihoods.

#### Harnessing Cellular Power

"Twenty years ago, no one thought the mobile phone would become one of the most important development tools in existence, but it has," wrote USAID Administrator Rajiv Shah in his annual letter in March. It is estimated that six billion cell phones are in operation worldwide. It is only natural that, as these mobile computers have become central to the lives of so many, they will become essential for the Agency's work.

On a basic level, cell phones have provided a new way of rallying financial and societal support for development projects. Famine War Drought (FWD), which ran from September 2011 to May 2012, is a leader in the "text-to-donate" trend. FWD made it easy for cell phone users worldwide to punch a few keys to send small donations that, when combined, supported efforts to provide clean water for livestock in Kenya or sustain Somali refugees in the drought-stricken Horn of Africa. In return, donors got transparency — the ability to trace their dollars by accessing maps, infographics, and social media on the FWD website. FWD generated over 200 million "shares" through sites like Twitter, Facebook, and YouTube.



HARNESSING TECHNOLOGY: Mobile phone usage has taken the world by storm. More people have mobile phone subscriptions than people have access to clean water and toilets.

Photo Credit: Getty Images

Meanwhile, a growing cadre of technology companies is tapping phones' potential to both collect and disseminate information from areas that can be difficult to reach in other ways.

A prime example is Ushahidi. In the wake of post-election violence in Kenya in 2008, Ushahidi's open source software, named after the Swahili word for 'testimony,' launched into action, attributing cohesive meaning to thousands of text messages (SMS), tweets, emails, and web postings, and providing real-time information to local and national communities and to the world.

Since then, the Ushahidi platform, traditionally used as event-based software in response to natural crises and times of civil unrest, has been taken up by dozens of organizations that seek a means of gathering data from disparate stakeholders, aggregating it, and displaying it in a meaningful way.

Watertracker, a component of USAID/Afghanistan's Sustainable Water Supply and Sanitation (SWSS) project, is one program that has begun using Ushahidi's platform to support sustainable development. Instead of relying on text messages to report information, as other deployments of Ushahidi had done, the developers found another means of efficiently reaching their targets. "We realized that an integral part of a long-term program like this one is to determine the right vehicle to receive information," said Rob Baker, an independent developer for Ushahidi. Because



**TECHNOLOGICAL ADVANCEMENTS:** The Watertracker platform allows users to view the status of wells around Afghanistan, identifying waterpoints that require maintenance and those that have been serviced.

Photo Credit: Arc Finance

Watertracker is targeted to rural communities that might have limited literacy and access, using voice recognition technology turned out to be a more efficient and locally appropriate means of reporting malfunctioning wells, rather than relying on texts.

When trained community members call in, their responses to a voice-activated menu provide SWSS with structured information to report broken wells to the appropriate contractor for repair. While the software infrastructure for the voice-recognition system was time consuming to develop, Mr. Baker said, "By relying on structured information, taking literacy rates into account, and working with a local partner to understand their capacity to respond, overall it's a more sustainable solution." Because the project was so successful, Watertracker's management will be transferred from SWSS to the Afghan Ministry of Rural Rehabilitation and Development and will ultimately incorporate nearly 100,000 wells throughout the country.

#### The Text to Change program, for example, allows users to participate in game-style learning activities using SMS. Partnering with USAID and Unilever, Text to Change hosted a Global Handwashing Day celebration in October 2011 for the community of Lwebitakuli in the Sembabule district of Uganda. Attendees sent texts pledging to wash their hands thoroughly with soap before and after certain activities. In response, they received texts with information on improving sanitation to reduce disease.

Texts can educate recipients not only about prevention, but also about productivity and access. As part of the Morocco Economic Competitiveness (MEC) program, USAID partner Development Alternatives, Inc. (DAI) installed nine automated weather stations, six of which are located in Morocco's Oriental Region, to collect information about rainfall, temperature, and evapotranspiration rates. Using that data, farmers are sent text messages relaying customized information, based on their crops and hyper-local weather conditions, about how much to water their crops. The program represents a significant improvement over the old system, known as *tour-d'eau*, whereby the Moroccan government delivered a pre-determined volume of water on certain days, and the farmers applied that water to their fields regardless of conditions. "They often ended up wasting time, money, and water in the process," said MEC Chief of Party Andrew Watson. Now farmers can store water and use drip irrigation to apply water to their fields in a more judicious manner. "There's no guestion that the farmers prefer to have full control over how much water they irrigate and when, rather than following the imposed schedule of the tourd'eau," said Edgar Ariza-Nino, a monitoring and evaluation specialist with MEC. Currently 300 farmers participate, and the program will soon expand for the growing season this spring and summer.

Text messaging is also being adapted for use in an urban setting through the Indonesia WATER SMS program. With funding from the USAID Development Grants Program, the Pacific Institute is leading an effort to "give a voice to the voiceless: the urban poor," according to Meena Palaniappan,

## Information, Accessible and Customized

When it comes to exchanging knowledge in an efficient and relatively inexpensive way, however, text messaging is still difficult to top. Even simple SMS-based programs can generate real impacts on health and livelihoods. "TECHNOLOGY IS NOT MAGIC. IT'S NOT FREE. IT'S NOT INSTANT. BUT IT'S A GREAT WAY FORWARD TO MAKE FASTER PROGRESS ON SOME OF OUR CORE ISSUES." Director of International and Water Community Initiatives. Rolling out as a threeyear pilot project in the metropolitan areas of Malang and Makassar, WATER SMS will allow city residents, with a particular emphasis on women and the urban poor, to send texts and emails to report problems with water services. Their responses will populate a crowd sourced map that the government and local utility company can rely on to more effectively correct both acute and chronic issues of water access. The project is being conducted in partnership with PATTIRO Indonesia, a governance NGO, and Nexleaf Analytics, the technical lead.

#### **Encouraging Innovation**

Looking to the future, USAID is fostering innovation in the water sector, recognizing that today's technologies could be obsolete ten years from now. Innovation is a common thread in Administrator Shah's plans for the Agency, manifesting itself in many ways: from new partnerships with research universities; to a new emphasis on mobile banking to access water and other resources; to President Obama's recently announced Broadband Partnership of the Americas, based on USAID's Global Broadband Innovations program; to USAID and World Bank competitions like Development 2.0, the LAUNCH Energy Challenge, and Water Hackathons.

These competitions have yielded some great success; in 2009, one of the winning entries to Development 2.0 was Ushahidi. Similarly, LAUNCH—co-sponsored by NASA, Nike, and the U.S. Department of State—announced last October that a finalist was Hydrovolts, a company that has invented a device able to harvest clean, renewable energy

from currently untapped water sources such as canals, waterfalls, and rivers. Its potential to provide affordable electricity to people in rural and remote areas is vast.

As the 21<sup>st</sup> century progresses, technology will continue to permeate the water sector in the developing world. The next challenge is to ensure that these introductions of technology are wide reaching, egalitarian, and effective. Success, however, lies less in the technology itself than in its ability to create greater access to information and communication in underserved populations.

For technology, according to Julia Bucknall, Water Sector Manager at the World Bank, "is not magic. It's not free. It's not instant. But it's a great way forward to make faster progress on some of our core issues."

K. Unger-Baillie

Ushahidi on Twitter Famine War Drought playlist on YouTube Ushahidi on Facebook

FOR MORE INFORMATION, VISIT:

**AT HER FINGERTIPS:** In Makassar, Indonesia, WATER SMS will allow city residents like Ms. Kursia to text her local utility when she has water problems, such as leaks and disrupted service.

Photo Credit: Misha Hutchings, Pacific Institute

## CURRENTS

*Currents* provides a brief overview of selected USAID funded programs dedicated to water-related issues in the developing world. Each edition of *Global Waters* will highlight different programs from diverse regions and provide reports of the programs' recent activities, challenges, successes, and/or results. If you know of other USAID-funded programs that we might include in an upcoming edition of *Global Waters* please write to us at: waterteam@usaid.gov.



#### Israel and the United States Pledge to Bring Feed the Future Successes to Africa

Israel's Agency for International **Development Cooperation (MASHAV)** and USAID signed a Memorandum of Understanding on April 18, 2012 to bring Feed the Future projects to Ethiopia, Rwanda, Tanzania, and Uganda. Israel will bring its knowledge and successful experiences with water conservation, irrigation practices, and dry-land management to assist with the sustainable growth and development of the Horn of Africa. MASHAV and USAID will collaborate to improve agricultural production and productivity, reduce pre- and post-harvest losses, and share irrigation and water technology. Assistance will incorporate cross-cutting approaches, such as implementation of applied research and development results, gender, capacity building, nutrition, and climate change.

## Drought Partnership in the Horn of Africa

USAID has launched the Global Alliance for Drought Resilience and Growth partnership to strengthen coordination between development partners, increase economic growth, build new partnerships with the private sector, and increase food security in the Horn of Africa. Hoping to break the cycle of famine and drought in the region, the Alliance capitalizes on the progress that has been made by African governments and international organizations to implement agricultural strategies and investments. USAID's aggressive response to the recent crisis helped to save more than 4.6 million vulnerable people by providing food and improved the lives of millions more through increased access to water, sanitation, and critical medical assistance.

#### USAID Joins Sanitation and Water for All (SWA) Partnership

At the Sanitation and Water for All (SWA) Partnership's High Level Meeting in April 2012, USAID announced it was joining SWA as a full partner. The SWA Partnership brings together governments, donors, civil society organizations, and development partners to achieve sustainable sanitation and drinking water. USAID and the U.S. Department of State also agreed to commit \$1 million to the World Bank's Water and Sanitation Program to support the SWA-led National Planning for Results Initiative, which promotes national planning efforts related to sanitation and water. On a global scale, the economic gains to be made from investing in sanitation and water are estimated at \$170 billion per year.

#### PSNP GRAD to Help Ethiopians Build Resilience to Climate Change

Building on the successes and lessons learned from the 2008-2011 Product Safety Net Program (PSNP) Plus in Ethiopia, PSNP Graduation with Resilience to Achieve Sustainable Development (GRAD) was launched in February 2012. PSNP GRAD will focus on supporting climate change adaptation activities to help Ethiopians prepare for drought and famine by addressing the high vulnerability of the chronically food insecure provinces. The original goal of PSNP was to help resolve Ethiopia's increasing need for food aid and other humanitarian assistance. PSNP GRAD aims to help households meet their year-round food needs and withstand disasters, such as drought, with the knowledge they have learned about climate change adaption and agriculture. PSNP GRAD will assist rural households in enhancing their livelihoods by helping them graduate from complete reliance on the PSNP to learning how to earn farm and off-farm income.



Neter Credit: Neta: TerrelI/USA:

#### Public-Private Partnerships Boost Jamaican Communities

USAID has created three public-private partnerships in Jamaica to boost small enterprises, bring technology to schools, and improve sanitation and access to clean water. The first partnership, between USAID and Jamaican National Building Society, will create a Social Enterprise Boost Initiative to support 10 small enterprises, with a focus on women and children. The second partnership, with Caribbean food processing company GraceKennedy Ltd. and Western Union, will train teachers and bring technology to 13 schools so that more than one thousand students can receive computers and national job skills certification. Last, the Prince's Foundation for the Built Environment, a United Kingdom charity, has begun a three-year partnership with USAID to provide access to sanitation and clean water to the Kingston area. This program will also support small enterprises in the capital and surrounding areas.





A LONG ROAD: A man floats firewood after the July 2010 floods submerged almost 20 percent of Pakistan under water. Photo Credit: Gideon Mendel for Action Aid/Corbis

PAKISTANI FARMERS RECOVER THEIR FUTURES

IE FLOODS

Kalsoom Bibi is a widow like many others in Pakistan. Kalsoom and her four young children are just five of the 20 million Pakistanis whose lives were turned upside down by the July 2010 floods that submerged nearly 20 percent of the country under water. And their home was just one of 1.6 million destroyed in the massive natural disaster.

Prior to the floods, Kalsoom had eked out an income for herself and her children through subsistence agriculture on her one acre of land in Punjab province. After the floods destroyed her entire wheat crop and her house, she was forced to move with her sons and daughters and their two buffalos to a little tent on her land. "Life became very difficult for me," she said. "I was worried about the future of my children."

#### **A Dangerous Cycle**

While the floods were devastating for many Pakistanis, farmers like Kalsoom were some of the hardest hit.



EGAINING LIVELIHOODS: A farmer works to restore an irrigation canal as part of USAID/ Pakistan's cash-for-work program in Sindh. Photo Credit: USAID/Pakistan Farmers comprise 80 percent of Pakistan's flood-affected population, and agricultural damage totaled over \$5.1 billion. The floods struck right before the harvest of the spring crops, leaving two million hectares of standing crops destroyed and demolishing future income as well as current assets. Because 6.9 million hectares of Pakistan's most fertile land were submerged under water and irrigation infrastructure had sustained significant damage, the threat of long-term food insecurity loomed large.

Without income or any means of recouping their losses, many farmers would be forced to take their children out of school. The floods threatened to bring about an unending cycle of poverty, migration to urban centers, and poor health.

Bacha Wazir, a farmer and a father of nine from the village of Mandahai Chakdara in the Khyber Pakhtunkhwa province, acknowledged the impact of the floods on his children's futures. Even before the floods, he went into debt so he could send just two of his children to school. After the floods, Basha explained, "Like every father, I wish from the core of my heart to educate my children, but it requires resources that I don't have."

Kalsoom and Bacha were just two farmers of the five million whose livelihoods were restored through USAID's innovative post-flood relief program. USAID/Pakistan cooperated with the United Nations Food and Agriculture Organization (FAO) to introduce the Agriculture Recovery Project, which enabled Pakistanis to recoup their incomes while ensuring that their gains were sustainable.

#### **Restoring Livelihoods**

USAID/Pakistan faced a unique challenge when they endeavored to find relief for the multitudes of floodaffected farmers. The Agency had provided millions of dollars for technical assistance and support to farmers in the past, but the urgency of this situation required a different approach. "When you have a flood, it is an emergency humanitarian crisis. People are at risk of losing their lives," said Dr.William Patterson, director of USAID/ Pakistan's Office of Agriculture and Economic Growth. In this situation, "The first step is to focus on saving lives, and the next step is to focus on getting people back on their feet," he said.

The Agriculture Recovery Project was successful on both fronts due to its innovative, multi-pronged approach. USAID brought small-scale farmers quick relief by providing them with high-quality, certified wheat seeds and fertilizer and distributing feed, fodder, medicines, and other supplies for livestock. Wheat supplies went to 410,000 farm families and livestock supplies to 134,770 farmers.

#### While distributing this

urgently needed help certainly improved the prospects of the farmers, there was still a problem. The floods had damaged many of the on-farm irrigation systems that supported the crops. Some of the infrastructure was completely destroyed, while other irrigation canals were filled with mud, rendering them unusable. Without a way to get water to the crops, the seeds were almost useless.

USAID addressed this problem through a cash-for-work program, which paid flood-affected farmers to rehabilitate the damaged canals. This program achieved two pressing objectives: it provided farmers who had sustained significant losses with much-needed immediate income while enabling them to resume their agricultural livelihoods.

## "SUNFLOWERS ARE MORE DROUGHT-RESISTANT AND REQUIRE LESS WATER THAN WHEAT, THUS SERVING THE GOAL OF 'MORE CROP PER DROP.'"

Their hard work paid off. Thousands of flood-affected Pakistanis rehabilitated over 1,300 canals. They reinforced many with bricks and cement to seal the cracks in the walls.

USAID/Pakistan Project Management Specialist for Agriculture Mohammed

Ghani Khan credited the cash-for-work program with much of the Agriculture Recovery Project's success. "Through this component, farmers not only restored their on-farm irrigation systems but also earned cash to restore their immediate livelihoods," he said.

#### **Adapting to Local Needs**

Although the Agriculture Recovery Project was successful in helping farmers earn incomes while continuing their ways of life, providing relief to millions of people scattered throughout a country as large and diverse as Pakistan was no simple feat. When implementing the project, staff found they had to take steps to accommodate local conditions in each of the three provinces where it operated.

BLOOMING FUTURES: Happy children play in the fields of sunflowers, which were grown through USAID/Pakistan's Sindh Agriculture Recovery Program. Photo Credit: USAID/Pakistan "The challenges vary from province to province," said Mr. Khan. For example, Punjab and Khyber Pakhtunkhwa provinces are densely populated, so identifying those most in need of assistance was relatively easy. However, Balochistan province comprises 42 percent of the land in Pakistan and is much less densely populated, so identifying and reaching the neediest farmers proved difficult. To confront this challenge, project staff relied on the residents themselves. "We used mosques to get people together," Mr. Khan said. "We'd explain the criteria, and they would form groups. They themselves would identify the most poor and vulnerable among them."

But the problems in Sindh province required some real ingenuity to solve. Sindh sustained the most damage from the floods, but because floodwaters did not recede there until after the wheat season was over, it could not be accommodated under the aegis of the project. USAID was tasked with finding a quick fix to put struggling Sindhis back on their feet. Their solution: sunflowers. USAID introduced sunflowers to Sindh as part of the separate Sindh Agriculture Recovery Program. Like the Agriculture Recovery Project, the Sindh Program introduced a cash-for-work program to rehabilitate onfarm irrigation systems. Instead of distributing wheat to the province's most destitute, however, the Agency distributed sunflower seeds. "There was a demand for sunflowers in Sindh, so we introduced sunflower seeds," Mr. Khan said.

Sunflowers were an appropriate substitute for wheat because they have a shorter crop cycle and could be cultivated later in the year, after the floodwaters had receded. They also have greater overall yields than wheat and have a high value in the Pakistani market. "You can link it to Pakistan's edible oil needs," said Mr. Khan. "Pakistan imports \$1.6 billion a year of edible oil, so there is a big market for it." Lastly, sunflowers are more droughtresistant and require less water than wheat, thus serving what Dr. Patterson described as one of USAID/Pakistan's primary agricultural goals: "More crop per drop."

"WE USED MOSQUES TO GET PEOPLE TOGETHER. WE'D EXPLAIN THE CRITERIA, AND THEY WOULD FORM GROUPS. THEY THEMSELVES WOULD IDENTIFY THE MOST POOR AND VULNERABLE AMONG THEM."

> A PROUD RETURN: The Agriculture Recovery Program helped farmers, like this one in Khyber Pakhtunkhwa, get back on their feet after the 2010 floods.

Photo Credit: Mehdi Ali Khan, USAID/Pakistan

#### **Looking Forward**

In the wake of the disastrous effects that flooding had on local livelihoods, the Agriculture Recovery Project and the Sindh Agriculture Recovery Program provided opportunities for Pakistani farmers to engage in incomegenerating activities. With a budget of \$62 million, Agriculture Recovery Project-related activities generated \$185 million in income for Pakistani farmers, nearly tripling USAID's investment there. Sindh Agriculture Recovery Program activities generated an additional \$19 million in income for Sindh's farmers. While these successes are already formidable, the full extent of the benefits of the improved irrigation infrastructure and the high yield crops might not be fully realized for years.

A number of large-scale irrigation projects are also in the works. Two of the most promising projects are already underway – the construction of multi-purpose dams in Satpara and Gomal Zam. While the dams are officially energy sector projects, they will also impact farmers by providing water to irrigate over 83,000 hectares of farmland. Production will start soon, according to Dr. Patterson.

In the meantime, Pakistan's farmers are enjoying the fruits of their labor. Kalsoom Bibi is now one of the millions of self-sufficient small-scale farmers. "I never expected that someone would help me in this way," she said. "I keep USAID and FAO in my prayers, for they helped me in a time of distress."

#### C. Zeilberger

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FOR MORE INFORMATION, VISIT: Seeds of Change documentary on YouTube Sindh Agriculture Recovery Project documentary on YouTube USAID/Pakistan on Facebook



**SEEDS OF CHANGE:** A farmer from Jacobabad takes home seeds and fertilizer provided by the Agriculture Recovery Program. Photo Credit: USAID/Pakistan



**REBUILDING THEIR FUTURES:** Residents of the village of Chulundrian in northern Pakistan's Konch Valley unload supplies provided by USAID for building sanitation facilities near their homes. Photo Credit: Kaukab Jhumra Smith, USAID REAL IMPACT

## THE BEST OF AMERICA A CONVERSATION WITH THE ARCHITECTS OF THE U.S. WATER PARTNERSHIP





AARON SALZBERG Photo Credit: USAID



**BANDING TOGETHER: :** The U.S. Water Partnership (USWP) has partners from the private sector, non-governmental organizations, academic and scientific institutions and U.S. government agencies.

Photo Credit: U.S. Department of State

CHRISTIAN HOLMES Photo Credit: Denis Largeron

ON WORLD WATER DAY, MARCH 22, 2012, SECRETARY OF STATE HILLARY RODHAM CLINTON LAUNCHED THE U.S. WATER PARTNERSHIP (USWP), A PUBLIC-PRIVATE PARTNERSHIP THAT SEEKS TO MOBILIZE U.S.-BASED KNOWLEDGE, EXPERTISE, AND RESOURCES TO ADDRESS WATER CHALLENGES ACROSS THE GLOBE – PARTICULARLY IN THE DEVELOPING WORLD. USWP HAS FIVE FOUNDING PARTNERS AND 22 NEW PARTNERS FROM THE PRIVATE SECTOR, NON-GOVERNMENTAL ORGANIZATIONS, ACADEMIC/ SCIENTIFIC INSTITUTIONS, AND U.S. GOVERNMENT AGENCIES.

GLOBAL WATERS SPOKE WITH AARON SALZBERG, SPECIAL COORDINATOR FOR WATER RESOURCES IN THE BUREAU OF OCEANS, ENVIRONMENT, AND SCIENCE AFFAIRS AT THE UNITED STATES DEPARTMENT OF STATE AND CHRISTIAN HOLMES, GLOBAL WATER COORDINATOR AT USAID ABOUT THE PARTNERSHIP.

#### GW: WHAT SHOULD WE KNOW ABOUT THE USWP?

**Aaron Salzberg**: This is a partnership intended to mobilize knowledge, expertise, and resources of the United States to strengthen water security, particularly in developing countries. It responds to a number of challenges, but our hope is that it will provide a platform to encourage and facilitate the engagement of a broad range of actors within the United States to work on water issues internationally. It also puts into practice the "whole-of-America" approach that Secretary Clinton has often talked about: The idea that we can mobilize the best and brightest from the United States to address our foreign policy and development challenges.

**Christian Holmes:** There is a huge demand for information related to many aspects of water. USAID will support USWP's efforts to develop a portal that would enable the public and private sector to exchange information to address a wide variety of water issues. It would be tremendous to have a database that would enable people to locate examples of solutions, successful activities.

#### THE USWP CALLS FOR SHARING OF INFORMATION AND KNOWLEDGE. IS THE "KNOWLEDGE PORTAL" THE PLATFORM FOR CARRYING THAT OUT?

**Salzberg:** Yes, it will be one of the tools of the partnership. The web-based knowledge portal will increase access to existing materials, best practices, and lessons learned from U.S. government agencies, the private sector, non-profit organizations, academia, and expert organizations, hopefully in a useful way. The key will be getting the consumer to the information they need or want.

**Holmes:** In addition to USAID, there are several U.S. government agencies with knowledge management tools that have signed up to be partners in the USWP. We hope that partners will contribute to the information platform their information and data dealing with best practices that deal with water in different ways. This would be an achievement.



**INNOVATIVE TECHNIQUES:** This USAID-funded water plan in Jordan is bringing 100,000 cubic meters of water daily to 700,000 people in the Greater Amman area

Photo Credit: Black and Veatch

#### WHAT INSPIRED THE IDEA OF A PUBLIC-PRIVATE PARTNERSHIP?

**Salzberg**: I think the idea has probably been around for a long time but a number of things just made this the right time. This includes Secretary Clinton's strong interest and leadership on water, the growing demand internationally for access to what the United States does to address our water challenges, and the increasing efforts by the U.S.based non-governmental community in water. We also had strong interest from many of our U.S. technical agencies in more effectively sharing their knowledge with the world. **Holmes**: We know from experience that public-private partnerships can make a significant contribution to development. We also know that knowledge critical to solving development challenges is located within a wide variety of public and private entities. What inspires us is the possibility that the systematic collection and sharing of information will, for example, accelerate the provision of technical assistance by linking public and private sector experts with a wide range of development needs.

#### CAN YOU GIVE AN EXAMPLE OF A PROJECT OR SITUATION FOR WHICH USWP WILL BE UNIQUELY BENEFICIAL?

Salzberg: Before USWP launched, the U.S. Department of State was contacted by the Government of Indonesia. They wanted to send a team of government officials to the United States to learn about how we do wastewater management and needed help with putting together an itinerary to meet their individual needs. So, we turned the request over to USWP, who shared it with their partners who work directly with the Government of Indonesia. The study tour has happened and all sorts of follow-on activities are being considered - all outside the U.S. government framework. One can imagine over time, that as different partners join, even local communities and municipalities who have good experiences could handle a request like that. So, USWP is an entity that can reach into the U.S. Government and outside it, where much more of this expertise now lies.

#### WHAT IS A "BEST-OF-U.S." APPROACH?

**Salzberg:** It's drawing upon the entirety of the U.S. experience to provide solutions to our foreign policy and development challenges. It's recognizing that we, the U.S. Government, do not have the resources nor necessarily the expertise to address something as big as water. The United States has had, and still has, its share of water challenges. We should be sharing these solutions. I was speaking recently at the annual meeting of the National Association of Water Companies. Utility operators came up to me and said, "I'd be willing to give up my two weeks of vacation to work with a utility in a developing country." These folks have hands-on knowledge we should be putting to work. The small-scale rural service providers, the local governments, the NGOs, the universities, and the private sector all have a lot to offer.

**Holmes**: From a USAID perspective, we realize that to really be successful in international development you have to have partners. It's absolutely critical. I think that having a platform that provides information on the dimensions of problems becomes a tremendous way to begin the dialogue on developing partnerships.

#### WHAT DO YOU EXPECT EACH PARTNER TO CONTRIBUTE?

**Salzberg:** Well, our hope is that partners contribute in whatever way makes the most sense for them. For some that may mean providing financial support or seconding staff; for others it may be providing access to knowledge, best practices, or modeling tools. Our expectation is that each partner comes to the table offering something into the partnership.

**Holmes:** We hope that the USWP will provide a platform for people with different expertise to share challenges, generate some new solutions, and agree to partner to implement solutions on approaches.

#### HOW WILL THE PARTNERSHIP WORK TO SCALE UP SUCCESSFUL WATER PROJECTS?

**Salzberg:** Hopefully in two ways. First, by sharing successes. Success breeds success. If people see what works, more will follow. Second, by providing a platform for discussion among the partners. We have a good mix of funders, thinkers, and practitioners. As they begin to work together and identify areas of common interest, we would expect to see partners spinning-off to pool and leverage their own resources to scale up their impact.

**Holmes:** To scale successful activities often requires new information, resources, and partners, and our hope is that the USWP will help catalyze such additional value.

#### HOW DO YOU SEE PROVIDING TECHNICAL ASSISTANCE AND "BEST OF U.S." KNOWLEDGE ON WATER GOVERNANCE FITTING INTO THE KEY DELIVERABLES OF THE PARTNERSHIP?

**Salzberg:** The governance issue is at the heart of many of the challenges faced within the water community – everything from integrated water resources management to improving cost recovery. I know a question I get



MONITORING TOOLS: Local communities are actively involved in the water quality monitoring activity in the Cikapundung watershed in West Java. The monitoring applies simple tools such as the use of biological indicators to test water depth, quality, and pH balance.

Photo Credit: USAID/ESP

a lot is 'how does the U.S. manage a community asset in a decentralized system?' There is a huge craving for knowledge about how the United States has organized itself, how the states work with the federal government, the roles of the different federal agencies, and how they work. How do these agencies work together to provide the kind of knowledge, resources, and management that we have in the United States? I think this governance element will be one of the most highly requested pots of information that we can offer.

#### WHAT ARE THE NEXT STEPS FOR THE PARTNERSHIP? HOW CAN INTERESTED COMPANIES, NGOS, AND OTHERS JOIN?

**Salzberg:** Building functionality. Interim staff, a steering committee, and a standardized application process all need to be in place, and the partnership needs to start delivering. The sooner the partnership starts delivering results, the quicker this will grow. Right now, the Global Environment Technology Foundation is acting as the interim secretariat for the partnership. Anyone interested in joining should contact Chuck Chaitovitz at chuck.chaitovitz@getf.org.

**Holmes:** As a next step for the partnership, USAID will methodically examine what data and information we have which might best support the partnership. An example of such data is that which is contained in our Safeguarding the World's Water Report.

A. Gambrill

FOR MORE INFORMATION, VISIT:

U.S. Water Partnership

U.S. Water Partnership PSA on YouTube





#### JUNE

#### June 18-19, 2012 Los Cabos, Baja California Sur, Mexico

#### G20 Summit

Mexico will chair the Group of 20 (G20) Summit this year. A forum for international cooperation on international economic and financial agendas, the 2012 Summit will focus on enhancing food security, promoting sustainable development, green growth, and the fight against climate change.

#### JUNE



#### June 20-22, 2012

#### Rio de Janeiro, Brazil

#### **Rio+20 – United Nations Conference on Sustainable Development**

At the Rio+20 Conference, world leaders and thousands of participants from various governments, the private sector, and NGOs will come together to discuss how to reduce poverty, advance social equity, and ensure environmental protection for the future. The Rio+20 Issues Briefs provide a channel to discuss and review issues relative to the objective and themes of the conference.

#### JULY



#### July 8-12, 2012

#### Istanbul, Turkey

#### Global Conference on Global Warming (GCGW-12)

The GCGW-12 focuses primarily on global warming and climate change issues in all disciplines and the potential solutions to these problems. The conference will cover policies, resources, energy management, green technologies, water conservation issues, and many other issues.

If your organization is hosting a water-related event you feel would be of interest to our readership, please provide us with information we can post in our calendar to help promote your event. Event listings will be chosen at the discretion of USAID's Water Office and the magazine's editors.



#### JULY

#### July 9-13, 2012 Cairns, Queensland, Australia

#### 12th International Coral Reef Symposium

The world's leading natural scientists, resource managers, conservationists, economists, educators, and graduate students from 80 countries will gather to present the latest advances in coral reef science. The goal of the symposium is to inform international and national policies and protocols in the conservation and sustainable use of coral reefs.

#### AUGUST

#### August 14-16, 2012

Zhengzhou, China

## 2012 International Conference on Water Resources Management and Engineering (ICWRME)

ICWRME is an annual interdisciplinary conference that publishes original research on water use and management. This includes the role of water in the physical, chemical, biological, and ecological sciences; public health; and related social and policy sciences. This year's conference will focus primarily on hydrogeology, civil engineering, water treatment, and environmental engineering.

#### AUGUST



Stockholm, Sweden

#### World Water Week

'Water and Food Security' is the theme of this year's World Water Week. The week's events provide an open platform for the exchange of views, experiences, and practices among the scientific, business, policy, and civic communities. Workshops, seminars, and exhibits are available for participants attending the event in Stockholm.

# **RESOURCE CENTER**

#### **IN PRINT:**



#### **U.N.-Water Global Analysis and Assessment** of Sanitation and **Drinking Water**

The 2012 U.N.-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) was released on April 12, 2012. With the goal of monitoring the inputs required to extend and sustain WASH systems and services, U.N.-Water GLAAS presents data received from 74 developing countries - up from 43 in 2011 – and 24 bilateral and multilateral agencies covering 90 percent of global official development assistance funds. Coordinated by WHO, the report found that, along with a chronic lack of technicians and skilled labor, countries report insufficient staff in place to operate and maintain sanitation and drinking water infrastructure. Analysis explores the reasons behind the disparities in access to sanitation and drinking water across different regions, communities, and income groups.





#### **World Water Development Report**

The 4th edition of the World Water Development Report (WWDR4), 'Managing Water under Uncertainty and Risk' was launched at the 6th World Water Forum in Marseille, France. The WWDR4 is a comprehensive review of the world's freshwater resources and seeks to demonstrate that water underpins all aspects of development and that a coordinated approach to managing and allocating water is thus critical. According to WWDR4, water needs to be an intrinsic element in decision-making across the entire development spectrum in order to meet development goals. This report builds on previous editions and elaborates on the interactions of water and the drivers of change.

**MORE INFORMATION** 



#### **Progress Report On Access to Drinking Water** and Sanitation Worldwide

The WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation, known as JMP, reports every two years on worldwide access to drinking water and sanitation and on progress towards achieving MDG targets for access to safe drinking water and sanitation. The 2012 report is based on data gathered from household surveys and censuses, including both recent and older data sets. The 2010 data in this report informed the achievement of the MDG to increase access to safe water. This report details work underway to refine both indicators and methods of monitoring as part of the 2010-2015 JMP strategy. It also discusses the beginnings of a process to develop new WASH goals, targets, and indicators beyond 2015, in alignment with the human rights to water and sanitation.

MORE INFORMATION

**SUBSCRIBE** 

#### **ONLINE:**



mWASH: Mobile Phone Applications for the Water, Sanitation, and Hygiene Sector

A new report from the Pacific Institute and Nexleaf Analytics explores how using mobile phones as tools to help improve water, sanitation, and hygiene (WASH) services can benefit those in poor rural and urban areas. The report analyzes how mobile technology applications are already being tapped in many areas, such as health, agriculture, and disaster relief, as well as WASH. Mobile phone technology like mWASH enables a community to identify an issue, initiate a conversation with stakeholders, and come to a resolution in a much shorter amount of time than before. The case studies in the report outline critical lessons for developing mWASH mobile applications to bring the most rapid and effective change to developing countries.



#### **U.N.-Water Data Portal**

U.N.-Water has created an information portal for policy makers, managers, and the general public on all water issues. The portal contains publications, activities, events, and statistics in graph and map form, including global and country-level maps, tables, and charts on indicators. The portal builds the knowledge base of water issues on the Internet and provides a platform for discussions on global water issues and challenges in the sector. Users can also find a library of interviews with water professionals and highlights from water conferences. seminars, and other activities.

MORE INFORMATION

#### **ON VIDEO:**



#### Last Call at the Oasis

In May 2012, Jessica Yu's water security documentary, Last Call at the Oasis, was released. Covering drought, climate change, health, and agriculture, in the areas of policy and business, the documentary explores the multifaceted water crisis, presenting problems, solutions, and lessons learned from across the United States and around the world. Through case examples, the documentary instills a sense of urgency in those unfamiliar with the global water crisis and showcases revolutionary and workable solutions. From the production company behind An Inconvenient Truth, Food, Inc., and Waiting for Superman, Last Call at the Oasis is inspired by Alex Prud'homme's book The Ripple Effect: The Fate of Freshwater in the 20th Century.

**MORE INFORMATION** 

MORE INFORMATION

## TRIBUTE





# A LIFE OF SERVICE



On February 3, 2012, our good friend and colleague, Daniel James Deely, passed away after four decades of service to USAID. Dan grew up in Gainesville, Virginia and earned his B.S. and M.S. degrees in Natural Resources Management. He spent several years in the U.S. Army Corps of Engineers, including service as a combat engineer platoon leader in the Mekong Delta of Vietnam working on river training and engineering. He then began his career in development at the U.S. Forest Service, before his work at a private remote sensing company, U.S. Environmental Protection Agency's Office of Water, and finally starting work at USAID in the early 1970s.

At USAID, Dan served in many capacities but most recently as Water Resources Advisor and program manager, helping to build what has become the Water Office at the Economic Growth, Education, and Environment Bureau. He managed training activities associated with the U.S. National Weather Service River Forecast System and supported climate prediction work implemented through National Oceanic and Atmospheric Administration's Office of Global Programs. He also served as technical representative for the Water and Coastal Resources IQC, providing technical backstopping to a myriad of programs in countries across the globe. Dan made invaluable contributions to the Agency's efforts in water resources management, pollution control, forestry, biodiversity conservation, and other natural resources activities. He also helped shape discussions and made recommendations for the implementation of the Senator Paul Simon Water for the Poor Act. Dan will be missed by family, friends, and colleagues alike.

#### To pay your respects, please visit:

http://www.tributes.com/show/ Daniel-James-Deely-93208840